

WHAT IS CLAIMED IS:

1. A method for determining transmission power of a first station in a wireless packet data communication system, comprising:
 - calculating a transmission power in the first station based on a previous data transmission;
 - transmitting a preliminary signal with the calculated transmission power from the first station to a second station; and
 - transmitting packet data from the first station to the second station, if the preliminary signal is acknowledged by the second station.
2. The method of claim 1, further comprising ending the packet data transmission when the packet data transmission is successfully received by the second station.
3. The method of claim 1, wherein the preliminary signal transmission comprises:
 - transmitting a preamble from the first station to the second station; and
 - receiving a channel occupying signal from the second station as a response to the preamble.

4. The method of claim 3 further comprising ending the packet data transmission process if the channel occupying signal is not received from the second station.

5. The method of claim 1, further comprising:
determining whether the packet data transmission is successfully received by the second station; and

increasing the transmission power of the first station if the packet data transmission is not successfully received by the second station.

6. The method of claim 5, further comprising:
transmitting a second preliminary signal with the increased transmission power from the first station to a second station;
transmitting packet data from the first station if the transmission of the second preliminary signal is successfully received by the second station; and
ending the packet data transmission when the packet data transmission is successfully received by the second station.

7. The method of claim 1, wherein the transmission power is determined in accordance with a transmission power used by the first station in a previous transmission

to the second station, a controlled amount of the transmission power by the second station, a changed amount of power received at the first station, and a channel compensating value of the second station.

8. Method of claim 7, wherein the transmission power is determined by summing the transmission power used in the previous transmission, the controlled amount of the transmission power by the second station, the changed amount of power received at the first station, and the channel compensating value of the second station.

9. The method of claim 1, wherein the first station is a mobile communication station and the second station is a base station.

10. A method for determining a transmission power of a first station in a wireless transmission system, comprising:

calculating a transmission power in the first station based on a previous data transmission;

transmitting a preamble from the first station to a second station with the calculated transmission power;

receiving a channel occupying signal from the second station as a response to the preamble; and

transmitting packet data from the first station to the second station after the channel occupying signal is received, and ending the packet data transmission when the transmission is successfully received by the second station.

11. The method of claim 10, further comprising ending the packet data transmission if the channel occupying signal is not received from the second station.

12. The method of claim 10, further comprising:

determining whether the packet data transmission is successfully received by the second station; and
increasing the transmission power if the packet data transmission is not successfully received by the second station.

13. The method of claim 12, further comprising transmitting the packet data to the second station at the increased transmission power.

14. The method of claim 10, wherein the new transmission power is calculated in accordance with a transmission power used by the first station in a previous transmission to the second station, a controlled amount of the transmission power by the

second station, a changed amount of power received by the first station, and a channel compensating value of the second station.

15. The method of claim 14, wherein the transmission power is determined by summing the controlled amount of the transmission power by the second station, the changed amount of power received at the first station, and the channel compensating value of the second station.

16. The method of claim 10, wherein the first station is a mobile terminal and the second station is a base station.

17. A wireless packet data communication system, comprising:
a mobile terminal configured to transmit packet data to a second station at a calculated transmission power, wherein the calculated transmission power is determined in accordance with at least one of a previous transmission power of the mobile terminal and control information received by the mobile terminal; and
a base station coupled to communicate with the first station and configured to transmit the control information to the mobile terminal.

18. The system of claim 17, wherein the control information is transmitted from the base station to the mobile terminal together with an acknowledgment message related to a previous data transmission from the mobile terminal.

19. The system of claim 17, wherein the mobile terminal is further configured to transmit a preliminary signal to the base station at the calculated power prior to transmitting the packet data.

20. The system of claim 19, wherein the mobile terminal increases the calculated transmission power if no acknowledgment signal is received from the base station.

21. The system of claim 17, wherein the calculated transmission power is determined by summing the previous transmission power, a controlled amount of the transmission power by the second station, a changed amount of power received at the first station, and a channel compensating value of the second station.

22. A mobile communication terminal, comprising:
means for calculating a transmission power based on a previous data transmission;

means for transmitting a preliminary signal using the calculated transmission power;

means for transmitting packet data if an acknowledgment to the preliminary signal is received; and

means for ending the packet data transmission when the packet data transmission is successfully received by the second station.

23. The device of claim 22, wherein the acknowledgment comprises control information sent from a base station.

24. The device of claim 16, wherein the mobile terminal is configured to transmit to a base station, and wherein the base station comprises:

means for receiving the preliminary signal from the mobile terminal;

means for transmitting a channel occupying signal in response to the preliminary signal;

means for receiving packet data transmitted from the mobile terminal; and

means for transmitting an acknowledgment signal to the mobile terminal when the data transmission from the mobile terminal has been received.

25. The device of claim 22, further comprising means for increasing the transmission power if no acknowledgment is received.

26. The device of claim 22, wherein the transmission power is calculated in accordance with a transmission power used by the first station in a previous transmission to the second station, a controlled amount of the transmission power by the second station, a changed amount of power received at the first station, and a channel compensating value of the second station.